

ISSN 1016-197X

CONTENTS

NUCLEAR SCIENCE AND APPLICATIONS **VOLUME 25** **NUMBER 1 & 2** **June, December 2016**

Cobalt Ion Adsorption by the Hydrolyzed AAm Grafted PET Films Prepared by γ -ray Irradiation	N. Rahman, N. C. Dafader and K. Hara	1
Assessment of Trace Contaminants in Sediments of the Poshur River Nearby Mongla Port of Bangladesh	F. Hossain, M. A. Islam, A. A. Mamun K. Naher, R. Khan, S. Das, U. Tamim S. M. Hossain, F. Nahid and M. Aminul Islam	7
Analysis of Continuum Spectra for The $^{209}\text{Bi}(n,d)$ ^{208}Pb Reaction	S. A. Sultana	13
Analysis of The $^{197}\text{Au}(p,d)$ ^{196}Au Reaction at 68 MeV with Direct Reaction Model	S. A. Sultana	17
Somatic Embryogenesis and Plant Regeneration of Papaya (<i>Carica papaya</i> L. cv. Shahi)	P. K. Roy, S. K. Roy, L. Hakim and A. N. K. Mamun	23
Preparation of Toxic Metal Adsorbent by Radiation Induced Grafting of Co-monomers (Acrylic acid/2-hydroxyethyl methacrylate) on Polyethylene Films	N. C. Dafader, N. Rahman, M. Rakibul Hasan, M. F. Alam, M. Kabir and M. S. Hossen	27
Surface Reaction Characteristics and Oxygen Evolution Capability of a Pd80at.%Ni Electrode in 30wt.%KOH medium	R. Das, M. Shajahan, A. K. M. A. Ullah H. M. B. Alam and A. K. M. F. Kibria	33
Analysis of Continuum Spectra for the $^{58}\text{Ni}(p,d)$ ^{57}Ni Reaction with Direct Reaction Model	S. A. Sultana and S. M. Hossain	41
Dust Particle (PM ₁₀ and PM _{2.5}) Monitoring for Air Quality Assessment in Naryanganj and Munshiganj, Bangladesh	B. A. Begum	45
Design and Development of a Publication Warehouse	M. S. Ahmed, J. Sadique, M. A. Zulquarnain, M. K. Newaz and M. M. Islam	49

Nuclear Science and Applications

Volume 25 Number 1 & 2 June, December 2016

Price Tk. 150.00 (For Bangladeshi), US\$ 15.00 (For Foreigner)

Published by: Bangladesh Atomic Energy Commission, E-12/A, Agargaon, Sher-e-Bangla Nagar Dhaka-1207, Bangladesh

Printed by: **Natundhara Printing Press**, 277/3 Elephant Road (Kataban Dhal), Dhaka-1205
Cell: 01711019691, 01911294855, Email: natundhara2014@gmail.com



**The Journal of
BANGLADESH ATOMIC ENERGY COMMISSION**